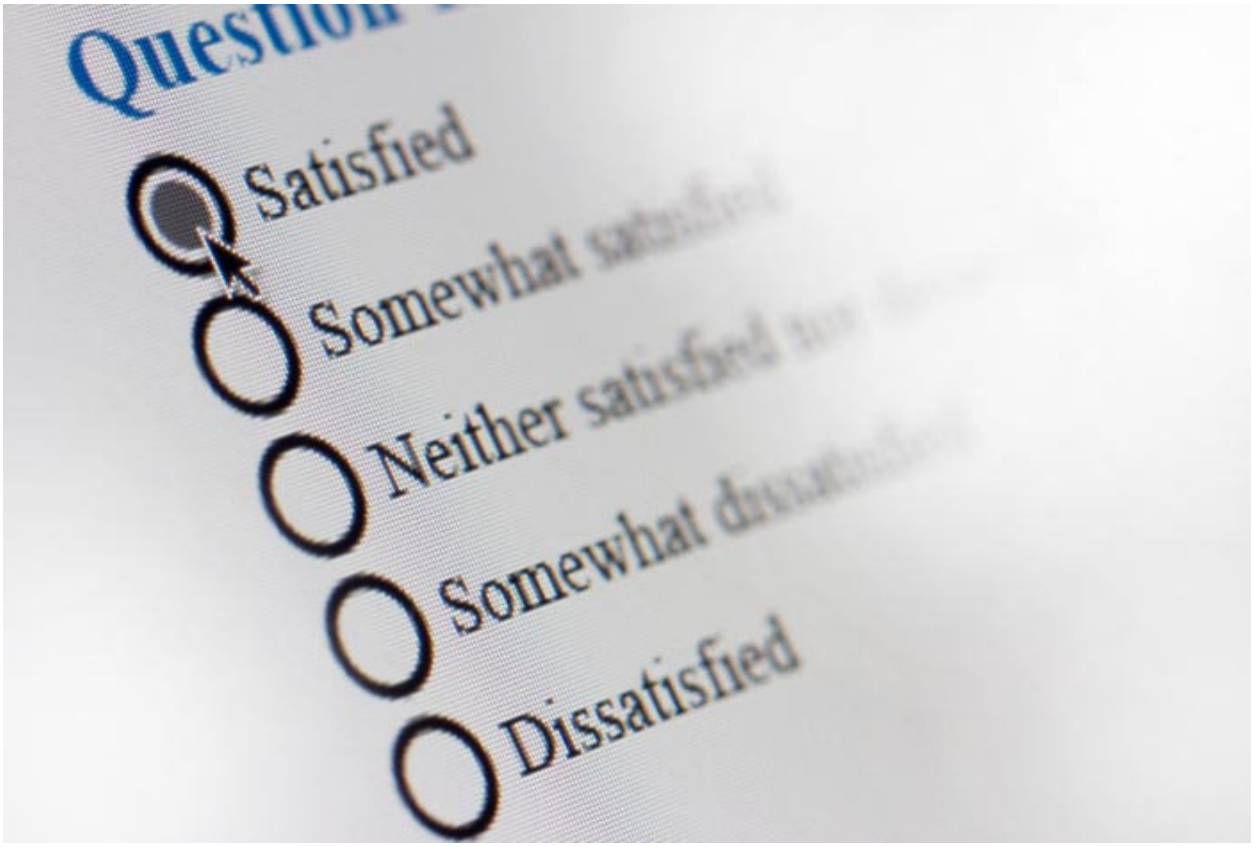
In other news

December 1, 2013



Community Connections readers survey – please let your voice be heard

Each year the Laboratory likes to ask readers of this publication how it's doing and what improvements could be made to make it even better. It's that time of year again, and we're asking that you take a few moments to let us know what you think.

Complete survey

You can respond between now and our next issue in February. At that time we'll let you know the results. We would like to hear from you, so take a minute right now so you don't forget.

If you have any questions regarding the survey, contact Linda Anderman with the Lab's Communication Office at (505) 665-9196 or anderman@lanl.gov. Thank you.

Protecting our feathered friends

The Laboratory's property is home to many forms of wildlife, including a large number of bird species. Its employees also take seriously their charge to protect the environment and the creatures that inhabit it. As a result, earlier this year a custodian working at the Materials Science Laboratory noticed a hummingbird nest on a branch that stretched across a side entrance walkway leading into the facility. Aware that construction crews working on new material chemistry labs in the building were heavily using the walkway, he notified a Lab manager, who quickly responded to his concerns.

Given that the mother bird and her two eggs needed another six weeks for nesting, not only were safety cones and caution tape put up to help ensure the avian visitors remained undisturbed, but the construction workers were asked to use a different door to get in and out of the building.

According to Chuck Hathcock, Lab biologist and migratory bird expert, "The actions taken by the worker and the managers are perfect examples of our dedication to the environment and compliance with laws such as the Migratory Bird Treaty Act." Hathcock also indicated that while this particular family has probably headed further south for warmer weather, many species, including the mountain chickadee, live in the region year-round and others, such the white-crowned sparrow and Oregon junco, migrate onto Lab property during the winter months.

You can read more about how the Lab studies and protects it bird populations in the report, *Los Alamos National Laboratory Fall Avian Migration Monitoring Report 2010-12*.

Lab breakthroughs highlighted in major media

Both *Time* and *Popular Science* took notice of Lab research recently. Popular Science's "Best of what's new" and Time's "The 25 Best Inventions of the Year 2013" included information on a bionic eye to which the Lab contributed its expertise and *Popular Science* also included the Lab's work on a portable x-ray machine.

Helping blind see

The Artificial Retina Project is a Department of Energy multi-year, multi-organization effort with the goal of a device to enable reading, unaided mobility and facial recognition for those with retinal diseases. The work has resulted in the Argus II, which has received approval by the U.S. Food and Drug Administration.

As the Popular Science article says of the device:

It consists of a miniature video camera mounted on a pair of glasses that sends footage to a microprocessor worn on a person's belt. The processor converts the visual data to electronic signals, which are transmitted wirelessly to a 60-pixel electrode array implanted in the back of the eye. The optic nerve picks up these signals and sends them to the brain, where they are interpreted as rudimentary gray-scale images.

The Lab's scientists served as the Advanced Concepts team and was responsible for assisting with helping model the electrical pathways of the visual data and with materials that helped capture and stimulate the correct parts of the brain for interpretation of the visual information coming in from the camera, among other challenges.

Portable x-ray machine

The MiniMAX is a lightweight, compact, low-cost x-ray system that can be used for security inspections, field medicine, specimen radiography and industrial inspection. Weighing in at five pounds, the Lab-developed equipment gets its energy from a 9-volt battery.

The original mention in the article is here.